

CLAIMS

What is claimed is:

Sub A1 1. A method for producing documents comprising:

2 associating an identifier with each data record in a data stream according to the type
3 of data in the data record;

4 specifying parameters for each identifier that may appear in the data stream, where
5 the parameters include formatting information relating to the presentation of the data
6 records in a document;

7 formatting each data record according to the parameters specified for the identifier
8 associated with the data record to create the document.

1 2. The method of claim 1 further comprising:

2 creating one or more regions, where each of the one or more regions define an area on
3 a document page, and where formatting instructions may be specified for each of the one
4 or more regions;

5 associating each identifier with a region; and

6 formatting each data record associated with an identifier within the corresponding
7 region on the document page.

1 3. The method of claim 1, wherein the parameters include data to be formatted in the document.

1 4. The method of claim 1 further comprising printing the document.

1 5. The method of claim 1 wherein the identifier is placed at the start of each data record.

1 6. The method of claim 5 wherein the identifier is a fixed length character string or a variable
2 length character string with a one or two byte field delimiter.

1 7. The method of claim 1

2 wherein said associating an identifier with each data record in a data stream is
3 performed on a first computer,

4 wherein said specifying parameters for each identifier that may appear in the data
5 stream and said formatting each data record according to the parameters specified for the
6 identifier are performed on a second computer,

7 and the first and second computers are connected over a communications network.

1 8. The method of claim 1

2 wherein said associating an identifier with each data record in a data stream is
3 performed on a first computer,

4 wherein said specifying parameters for each identifier that may appear in the data
5 stream is performed on a second computer,

6 wherein said formatting each data record according to the parameters specified for the
7 identifier is performed on a third computer, and

8 where the first, second and third computers are connected over a communications
9 network.

1 9. The method of claim 8, wherein the second computer does not have access to the data stream.

1 10. A method of formatting documents comprising:

2 receiving a data stream in which each data record therein is associated with an
3 identifier according to the type of data in the data record;

4 receiving a set of parameters, where one or more parameters of the set of parameters
5 correspond to each identifier, where the set of parameters include information relating to
6 the presentation of the data records in a document;

7 formatting each data record and creating the document by applying the one or more
8 parameters corresponding to each identifier to each data record associated with the
9 identifier.

1 11. The method of claim 10, wherein the document is sent to a printer for printing.

1 12. The method of claim 10, wherein the parameters include data to be formatted in the
2 document.

1 13. The method of claim 10 further comprising:

2 creating one or more regions, where each of the one or more regions define an area on
3 a document page, and where the presentation of information in each of the one or more
4 regions is controlled by formatting instructions specified for each of the one or more
5 regions in the set of parameters; and

6 prior to applying the one or more parameters corresponding to each identifier to each
7 data record, associating each identifier with one of the one or more regions, wherein each
8 data record is formatted within the one of the one or more regions.

1 14. The method of claim 13, wherein each data record formatted within a region of the first type
2 is repeated at the beginning of each page of the document.

1 15. The method of claim 14, wherein each data record formatted within a region of the second
2 type is repeated at the end of each page of the document.

1 16. The method of claim 15, wherein each data record formatted within a region of the third type
2 is repeated on each page of the document above a grouping of related data records formatted
3 within a region of the forth type until all of the grouping of related data records have been
4 formatted.

1 17. A method comprising:

2 specifying parameters corresponding to each identifier that may be associated
3 with one or more data records in a data stream, the parameters specify formatting
4 instructions for one or more data records, and a plurality of parameters define a set of
5 parameters.

1 18. The method of 17 further comprising:

2 receiving the data stream, where each data record of the one or more data records
3 therein is associated with each identifier according to the type of data in each data record
4 of the one or more data records; and

5 creating a document by applying the one or more parameters corresponding to
6 each identifier to each data record of the one or more data records associated with the
7 identifier.

Sub A2
11 19. The method of claim 17 wherein the set of parameters are sent to a formatter over a
2 communications network.

1 20. The method of claim 17 further comprising:

2 defining one or more regions, where each of the one or more regions defines an
3 area on a document page that will result by applying the set of parameters, and where
4 formatting instructions may be specified for each of the one or more regions;

5 associating each identifier with a region such that each data record associated with
6 the identifier will be formatted within the corresponding region in the document.

1 21. A method comprising:

2 retrieving data and information from a database;

3 arranging the data and information into a plurality of data records;

4 associating an identifier with each of the plurality of data records, according to the
5 type of data in each of the plurality of data records, where the plurality of data records
6 and associated identifiers comprise a data stream.

1 22. The method of 21 further comprising:

2 sending the data stream to a formatter.

1 23. The method of 21 further comprising:

2 receiving a set of parameters, where one or more parameters correspond to each
3 identifier.

4 creating a document by applying the one or more parameters corresponding to each
5 identifier to each data record associated with the identifier, where the parameters include
6 formatting information relating to the presentation of the data records in a document.

Sub A3 24. A machine-readable medium having stored thereon instructions, which when executed by
2 one or more processors, causes the one or more processors to perform the following:

3 receiving a data stream in which each data record therein is associated with an
4 identifier according to the type of data in the data record;

5 receiving a set of parameters, where one or more parameters of a set of parameters
6 correspond to each identifier.

7 formatting each data record and creating a document by applying the one or more
8 parameters corresponding to each identifier to each data record associated with the
9 identifier, where the parameters include information relating to the presentation of the
10 data records in a document.

1 25. A computer system for formatting documents comprising:

2 a processor configured to

3 receive a data stream of one or more data records, where each data
4 record therein is associated with an identifier according to the type of data in
5 the data record,

6 receive a set of parameters, where one or more parameters of a set of
7 parameters correspond to each identifier, and

8 format each data record and create a document by applying the one or
9 more parameters corresponding to each identifier to each data record

10 associated with the identifier, where the parameters include information
11 relating to the presentation of the data records in a document; and
12 a data storage device and memory to store data and instructions to be used by the
13 processor.

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